

**BEAVER CREEK Coal Company**

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**RECEIVED**  
JUN 16 1986



**DIVISION OF  
OIL, GAS & MINING**

June 12, 1986

Mr. Lowell Braxton  
Administrator  
Division of Oil, Gas & Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Re: Road Stabilization Plan  
Wild Horse Ridge  
CEP/015/007  
Emery County, Utah

Dear Mr. Braxton:

Enclosed are three copies of the proposed Road Stabilization Plan for the Wild Horse Ridge access road. This plan will provide for long-term stability and environmental protection, while still allowing for occasional access to the site by the landowner.

This new plan is based on our discussion in your offices on May 19, 1986. The enclosed maps represent the as-built alignment and grade of the road. Proposed drainage controls are also shown on the maps.

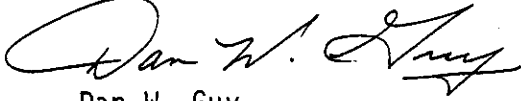
The road was designed and constructed under Class II standards, with the exception of certain drainage controls. This submittal includes plans to stabilize the road and enhance the drainage controls to meet those criteria.

Beaver Creek Coal Company is prepared to implement this plan immediately upon approval.

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If you have any questions, or need any further information, please let me know.

Respectfully,

A handwritten signature in cursive script, appearing to read "Dan W. Guy".

Dan W. Guy  
Manager Permitting/Compliance

DWG/rs

cc: Mr. G.E. Vaninetti, Savage Energy Services Corp.  
Mr. Jay Marshall, Beaver Creek Coal Company  
File 4-P-8-1-1

WILD HORSE RIDGE  
ROAD STABILIZATION PLAN

The following is a proposed plan to allow for long-term stabilization and drainage control for the Wild Horse Ridge access road:

CRITERIA:

- (1) The road is to be left in place as a Class II road to allow for occasional access into the property
- (2) All existing culverts will be replaced with water bars, with the exception of those crossing the main right fork and Bear Canyon drainage. *red design*
- (3) The road will be stabilized through the use of vegetation and hydrologic controls;
- (4) Drainage outlets will be protected from erosion by the use of natural rock, or other energy dissipators. *red design*

PROCEDURE:

- (1) Cracks, fractures or other significant rills or gullies in the road surface or downslopes will be repaired, filled in and compacted by the use of a dozer or backhoe;
- (2) Starting at the upper end of the road, the road surface will be regraded as necessary to create a slight (2%<sup>+</sup>) dip toward the highwall (ditch) side (see Figure 3);
- (3) Ditches will be cleaned and restored along the highwall side of the road (see Figure 3).

- (4) Designated culverts will be removed and replaced with water bars. Catch basins will be installed at the inlet to each water bar (see Figures 1 and 3). The 48" culvert at the lower end of the road will be left in place. To assure the adequacy of the crossing, an additional 48" C.M.P. will be placed along side the existing culvert. This, along with approximately 8' of headwater potential, will allow for passage of flows up to 250 cfs at the crossing. (It should be noted that a 60" culvert with approximately 3' of headwater has been approved and constructed in this same drainage just downstream from this crossing).

The existing stream (channel) crossing culverts in the right fork of Bear Canyon will also be left in place. All other culverts will be removed.

- (5) Water bars will be constructed at each of the removed cross culverts at intervals in accordance with Class II drainage control standards. (See Figures 1, 2 and 3 for water bar details and Plate 1 for locations);

- (6) Energy dissipators or other erosion protection will be installed at all road drainage outlets as required to prevent additional erosion.

- (7) The entire road surface will be scarified to a depth of at least 2", using a ripper or similar device;

- (8) The entire road surface will be hydroseeded and mulched, including the ditches, water bars, and at least 10' of the downslope fill material; (see Table 1 for seed mix and rate of application).

Note: Areas of barren downslope (fill) material will also be hydroseeded and mulched as needed to help prevent future erosion.

- (9) A steel, locked gate will be installed at the point where the road crosses the main channel of Bear Creek to prevent any unauthorized access;

- (10) The drainage control berm at the road junction with the Co-Op Mine access road will be reinstated if necessary.

INSPECTION/RELEASE

- (1) Upon completion of the work, a site inspection will be requested by Beaver Creek Coal Company. It is proposed that the Division of Oil, Gas and Mining coordinate the inspection and invite all involved parties or agencies whose approval is necessary to allow for final release of this road.
- (2) Based upon the inspection, reasonable problems or deficiencies will be corrected, if necessary. The work will be conducted in a professional manner, using standard, accepted practices for earthwork, drainage control and revegetation. It is understood that Beaver Creek Coal Company will be released from the responsibility of this road based upon the performance and approval of the work, not upon its long-term success (i.e. establishment of vegetation)
- (3) Upon approval of the stabilization effort by Beaver Creek Coal Company, it is understood that Beaver Creek Coal Company will be released from any further responsibility for the repair, maintenance or any effects of this road. The road and all gate keys will then be turned back to Nevada Electric Investment Company for their private use.

TABLE 1  
ROAD STABILIZATION SEED MIXTURE

Species	Hydroseeded Live Seed Lbs/Acre		Seed Numbers/Acre	
	Native	Introduced	Native	Introduced
<u>Agropyron intermedium</u> Intermediate Wheatgrass		2		176,000
<u>Stipa viridula</u> Green Needlegrass	1		181,000	
<u>Oryzopsis hymenoides</u> Indian Ricegrass	3		423,000	
<u>Agropyron dasystachyum</u> Thickspike Wheatgrass	4		616,000	
<u>Agropyron smithii</u> Western Wheatgrass	8		880,000	
<u>Melilotus officinalis</u> Yellow Sweetclover		1		260,000
<u>Poa pratensis</u> Kentucky Bluegrass		1		
<u>Sporobolus cryptandrus</u> Sand Dropseed	$\frac{1}{2}$		1,323,500	
<u>Agropyron spicatum</u> Bluebunch Wheatgrass		$\frac{1}{2}$		87,500
<u>Eragrostis trichodes</u> Sand Lovegrass	$\frac{1}{2}$		650,000	
<u>Borealis Utahensis</u> Utah Sweetvetch	1		60,000	
COLUMN TOTALS	17 $\frac{3}{4}$	4 $\frac{1}{2}$	4,134,500 89%	523,500 11%
GRAND TOTALS	22 $\frac{1}{2}$		107 seeds/ft. <sup>2</sup>	

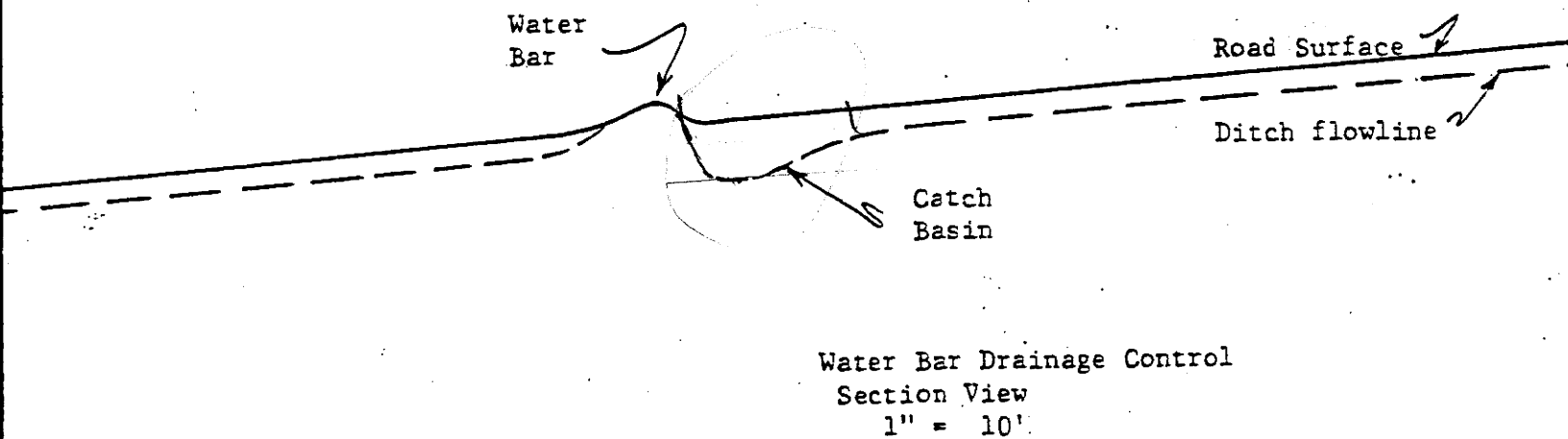
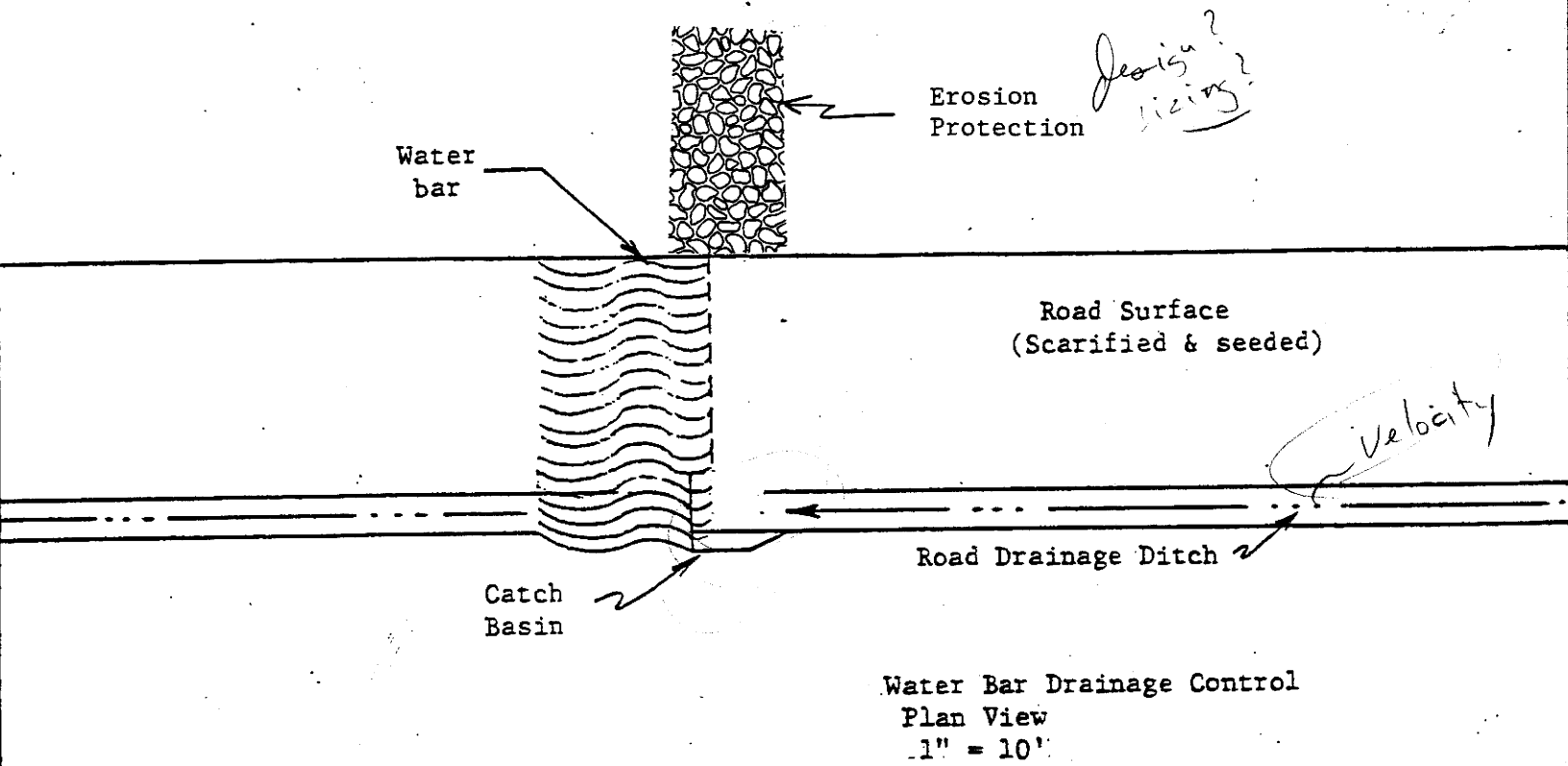
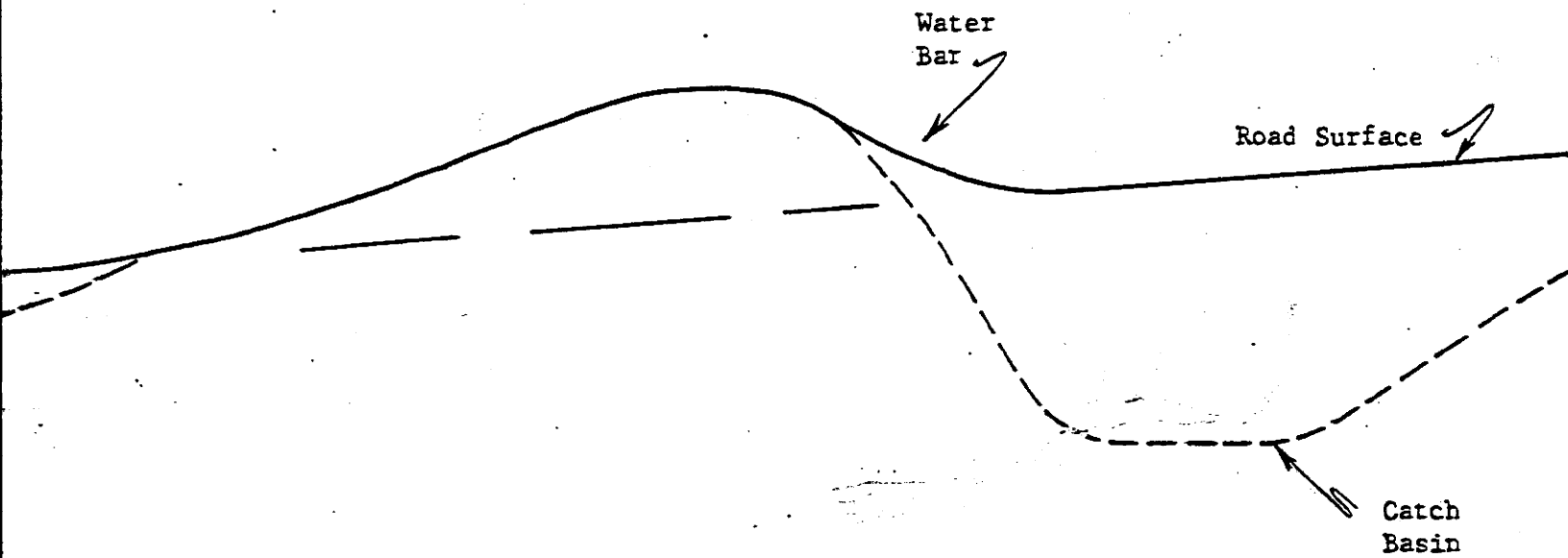
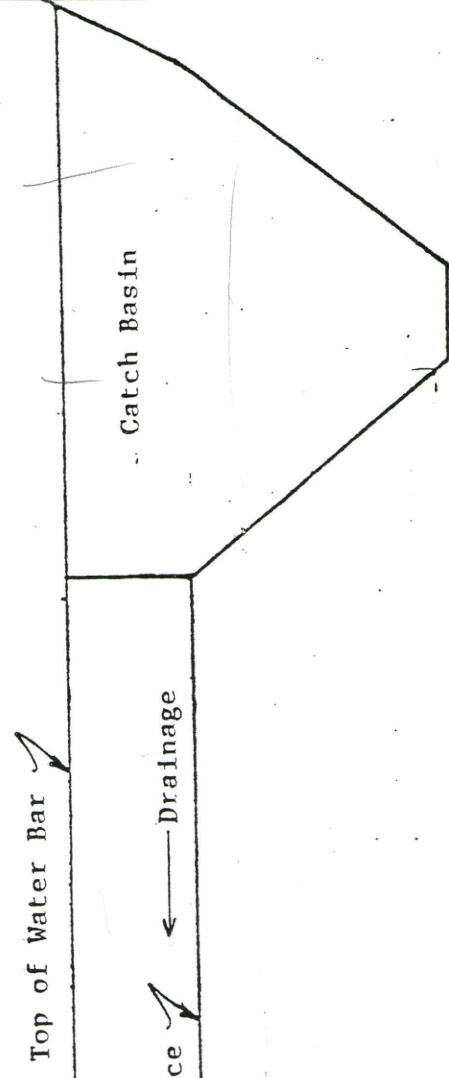
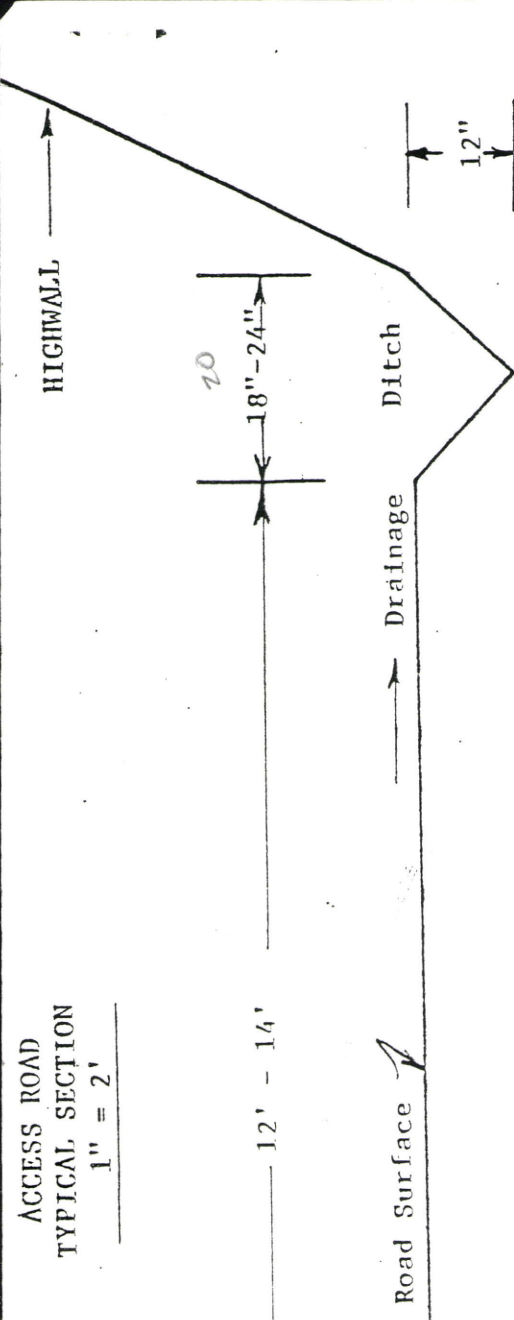


FIGURE 2



Water Bar  
Typical Section  
1" = 2'





Access Road  
 Typical Section at Water Bar  
 1" = 2'